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APPLICANT : ASAHI ORGANIC CHEM IND CO LTD;

INVENTOR : KONO HIROYUKI;

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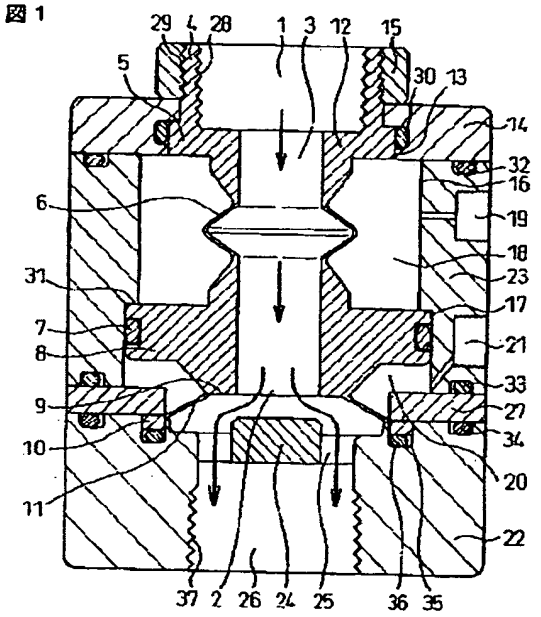
TITLE : AUTOMATIC VALVE

図 1



1…流入口
2…流出口
3…直線流路
4…螺合部
5…小径鍔部
6…ベローズ部
7…シール材
8…大径鍔部
9…弁体部
10…嵌合突部
11…薄膜部
12…筒状部材
13…段差部
14…蓋体
15…キャップナット
16…収容部
17…段差部
18…第1環状空間
19…第1作動流体流通口
20…第2環状空間
21…第2作動流体流通口
22…弁座体
23…本体
24…弁座
25…流路
26…流出開口
27…支持体
35…嵌合溝

ABSTRACT : PROBLEM TO BE SOLVED: To provide an automatic valve requiring no wide piping space, and having a compact whole body, a high Cv value, and no liquid sump.

SOLUTION: This automatic valve is provided with a cylinder member 12 which is formed with a linear passage 3 having an inlet 1 and outlet 2 in its inside, and integrally formed with a threaded engagement part 4 having a nut 15 in the axial direction of the passage in the outer circumference, a small- diameter flange 5, a bellows 6, and a large-diameter flange 8, a valve element 9 formed in the circumferential edge of the outlet 2, and a thin film part 11 having a fitting projection 10 in its circumferential edge; a lid body 14 having a stepped part 13 for fitting the small-diameter flange 5; a body 23 which has a first annular space 18 fixed to the lid body 14 and storing the bellows 6, a first operating fluid flowing port 19 communicated with the annular space 18, a second annular space 20 formed of the large-diameter flange 8 and the thin film 11, and a second operating fluid flowing port 21 connected to the annular space 20; and a valve seat body 22 clamping the fitting projection 10 of the thin film 11 together with the body 23 and having a projecting valve seat 24 in the center, a plurality of passages 25, and an outlet 26.